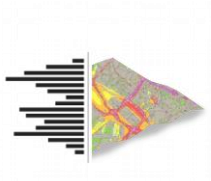
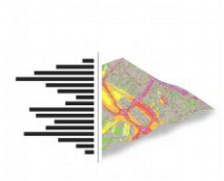


Noise Modelling

Séminaire de transfert COP – JTAV 2021



I.Vue globale



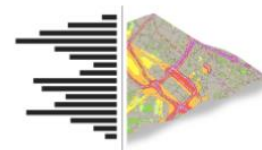
Noise-Planet



OnoMap



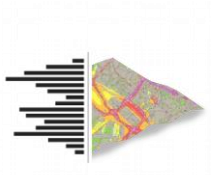
NoiseCapture



NoiseModelling



Community Maps



Noise-Planet

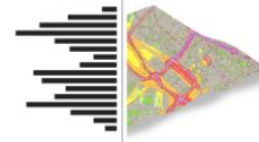


OnoMap



NoiseCapture

tag v1.2.19
Watch 24 Fork 28

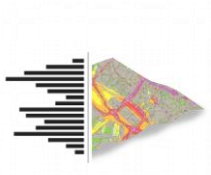


NoiseModelling

release v3.4
Watch 46 Fork 44



Community Maps



Open-Source



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Ifsttar / NoiseModelling Watch 31 Star 23 Fork 23

Code Issues 23 Pull requests 0 Projects 1 Wiki Security Insights

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(Formerly NoiseMap) A scientific code for outdoor noise evaluation (H2GIS plugin). <http://noise-planet.org>

road-noise emissions orbisgis propagation acoustics modeling gis

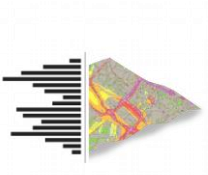
807 commits 3 branches 8 releases 7 contributors

Branch: cnossos New pull request Find File Clone or download

This branch is 294 commits ahead, 4 commits behind master. Pull request Compare

nicolas-f Merge pull request #79 from nicolas-f/clean_cnossos Latest commit 668fd7 on 19 Jul

Licenses	Update license-GPL.txt	2 years ago
demonstration	Add demo file	6 years ago
doc/fr	Fix RowsUnionClassification, add a random unit test , with seed value...	8 years ago
noisemodelling-emission	Use release version of H2GIS	4 months ago
noisemodelling-propagation	Merge branch 'cnossos' of github.com:ifsttar/NoiseModelling into clea...	last month

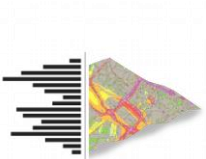
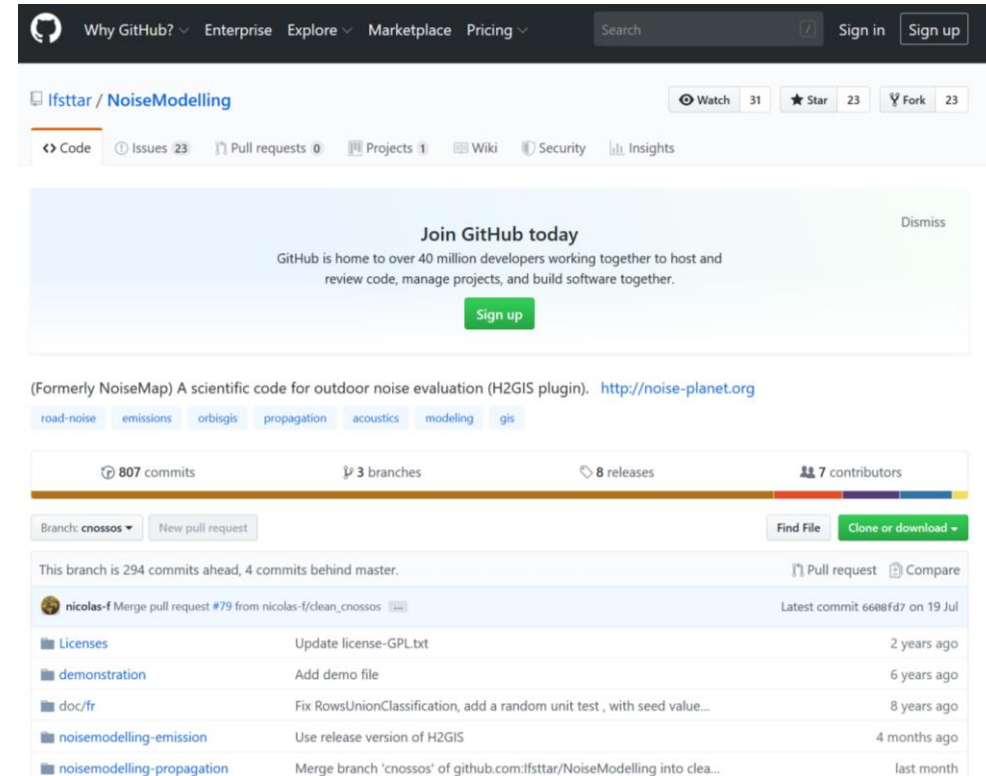


Open-Source

Open science

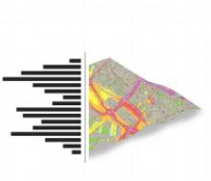
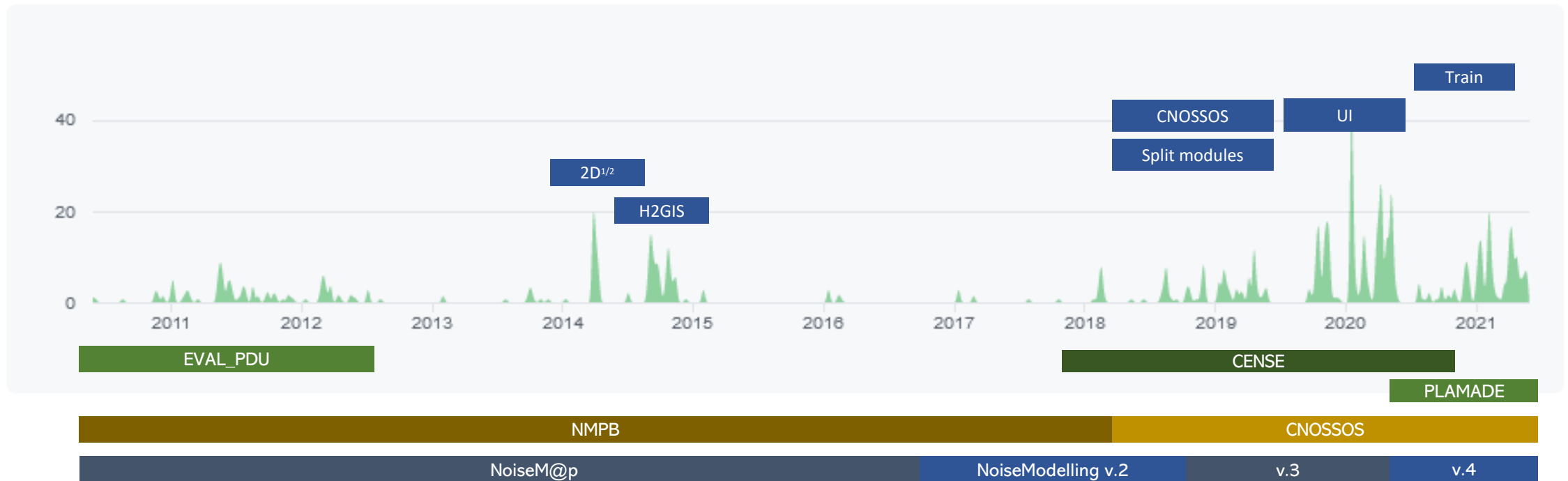
- Reproductibilité
- Traçabilité
- Transparence

Tester les résultats de recherche dans
un cadre opérationnel

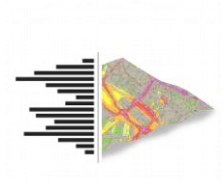


Historique

- Depuis 2010 (Eval-PDU)



II. Logiciel & Modèle acoustique



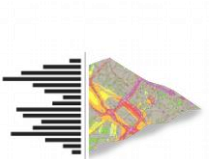
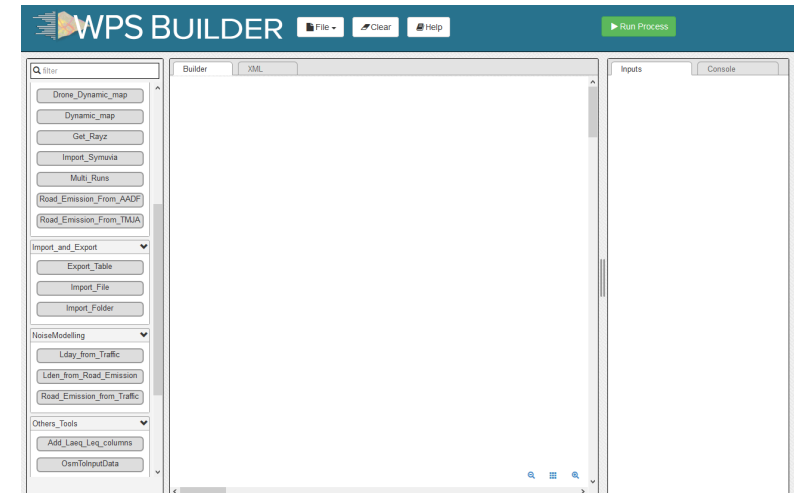
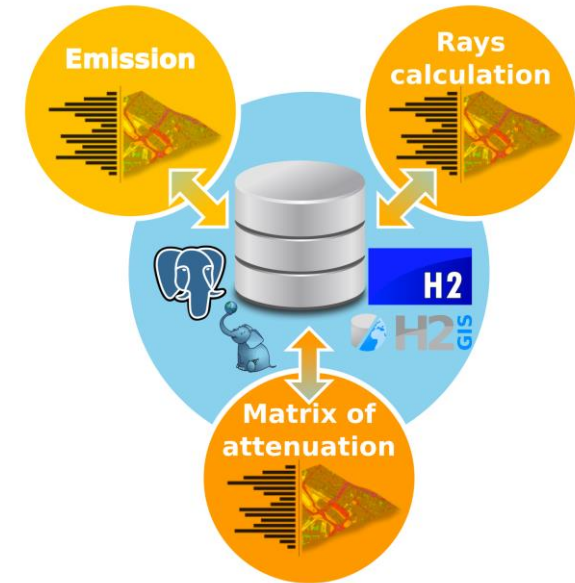
NoiseModelling

Logiciel NoiseModelling

Libraires JAVA - NoiseModelling

Connection Geoserver (local ou distance)

Interface Utilisateur



Librairies JAVA

Emission

Route

Fer

Recherche de chemin

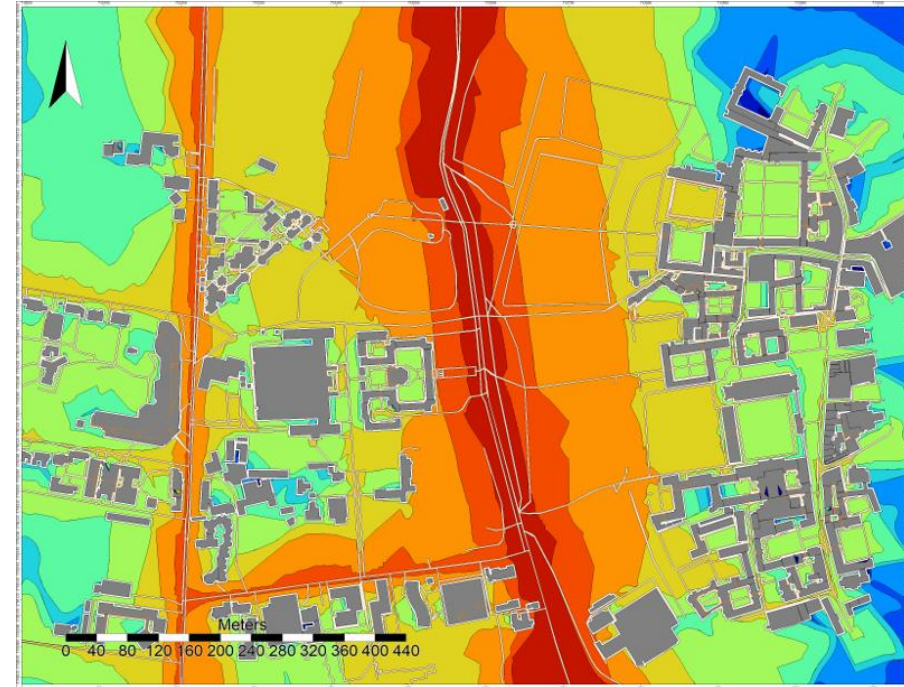
CNOSSOS-EU

Propagation

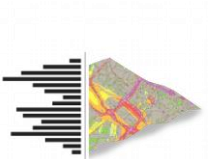
CNOSSOS-EU*

Connexion base de données

H2GIS/PostGIS



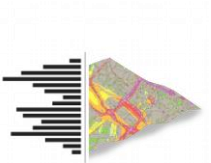
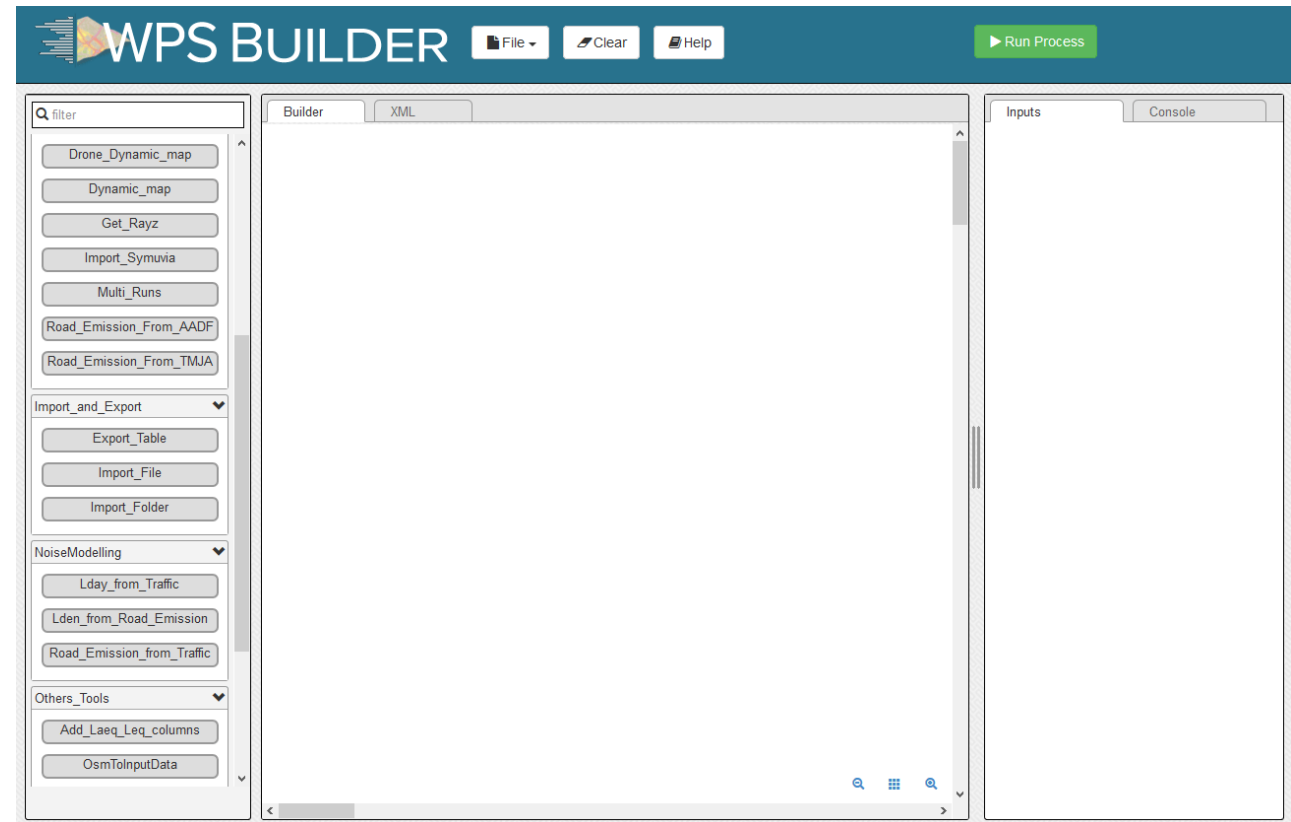
*~90 % of CNOSSOS-EU - Still missing : Multi-diffraction / Screen Train / Retrodiffraction / Rayleigh criterium



Interface utilisateur

+ 50 Blocs WPS

Basique mais fonctionnelle

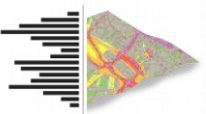


Questions courantes :

- C'est précis ?

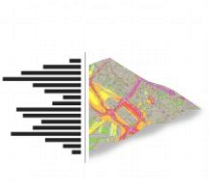
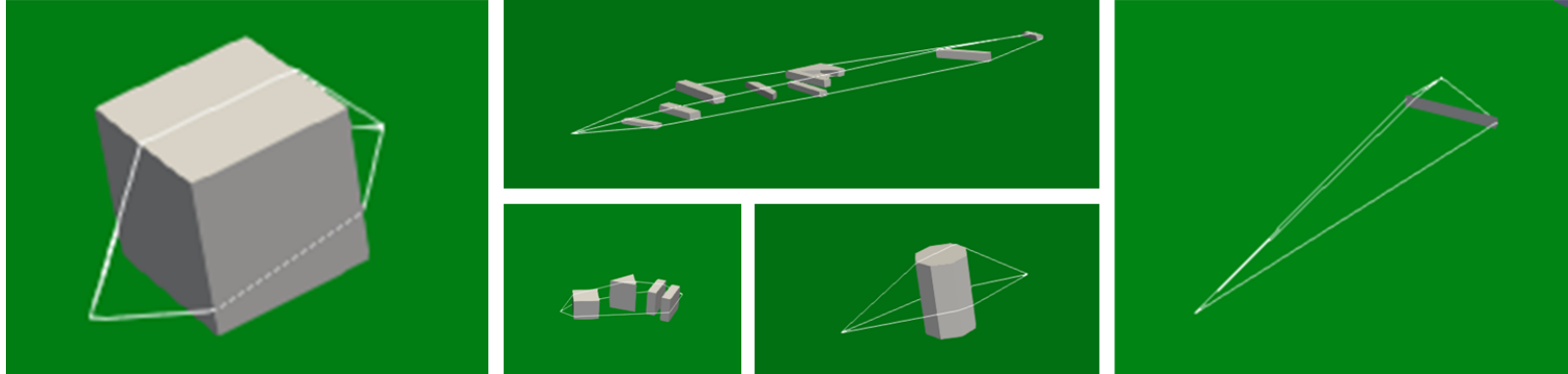


Valentin Lebescond, 2021



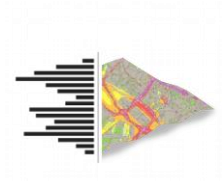
Questions courantes :

- C'est précis ?
- Qualité du développement ?



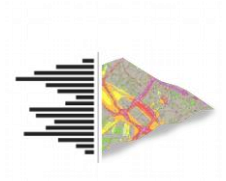
Questions courantes :

- C'est précis ?
- Qualité du développement ?
- Différent des autres ?
- Pour qui ?



Questions courantes :

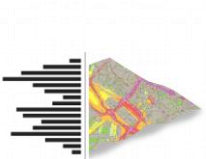
- C'est précis ?
- Qualité du développement ?
- Différent des autres ?
- Pour qui ?
- Temps de calcul ?



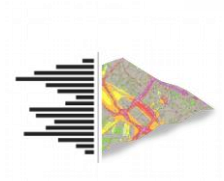
Questions courantes :

- C'est précis ?
- Qualité du développement ?
- Différent des autres ?
- Pour qui ?
- Temps de calcul ?
- Support ?

The image shows a composite of three screenshots related to the NoiseModelling project. On the left is a dark-themed documentation page for 'NoiseModelling latest' with a search bar and a sidebar menu containing sections like 'NOISEMODELLING PRESENTATION', 'TUTORIALS', 'USER INTERFACE', and 'FOR ADVANCED USERS'. The 'TUTORIALS' section is expanded, showing a 'Get Started - Tutorial' with a 'Requirements' list: 'Please install JAVA', 'Download the latest release', 'Run GeoServer', 'Run WPSBuilder', 'Upload files to database', 'Run Calculation', 'Export (& see) the results', and 'Know the possibilities'. Below this are links for 'Noise Map from OSM - Tutorial', 'Matsim - Tutorial', and 'Tutorials - FAQ'. In the center is a 'Get Started - Tutorial' page with 'Requirements' and 'Windows' instructions, noting that since version 3.3.2, an executable file has been provided. On the right is a screenshot of the GitHub repository for 'Ifsttar / NoiseModelling', showing a 'Join GitHub today' banner, repository statistics (807 commits, 3 branches, 8 releases, 7 contributors), and a list of recent pull requests including updates to licenses, demo files, and the H2GIS plugin.



III. Nouveautés 2021-2022



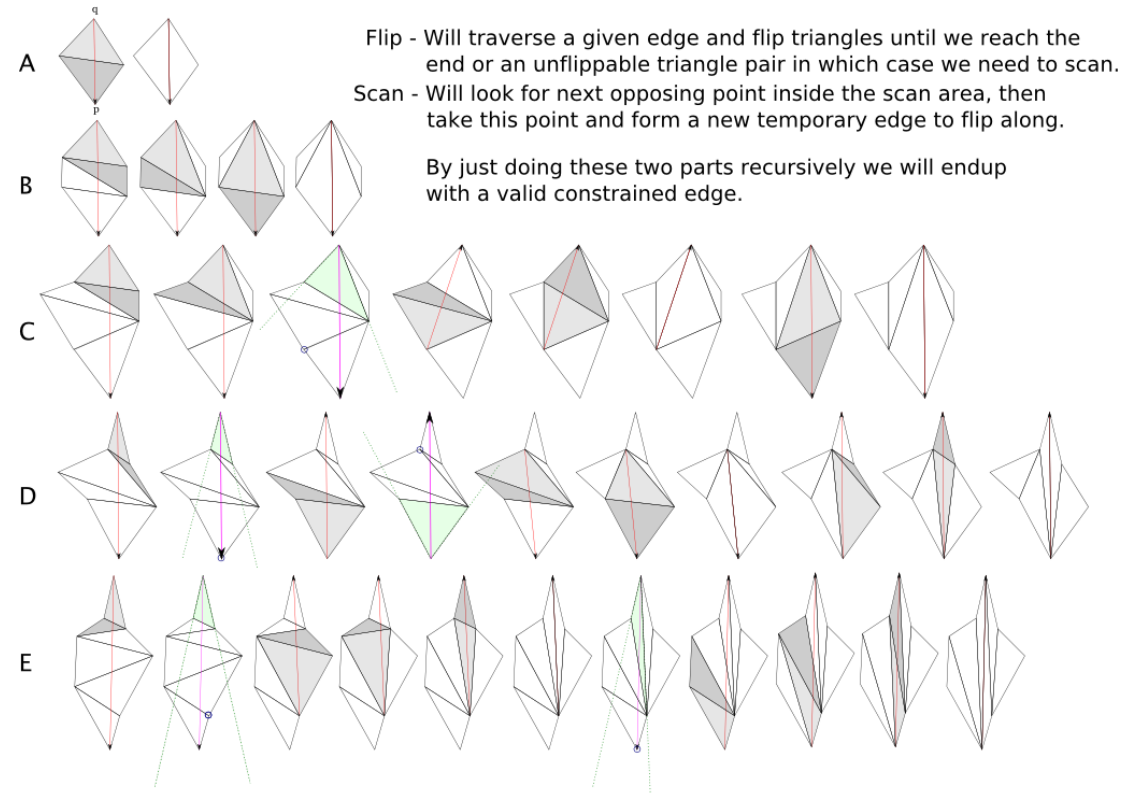
Quelques nouveautés

- Triangulation du domaine

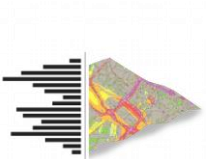
Algorithm realised by Thomas Åhlén (thahlen@gmail.com), December 2009

"FlipScan" constrained edge algorithm

visualised with 5 example cases

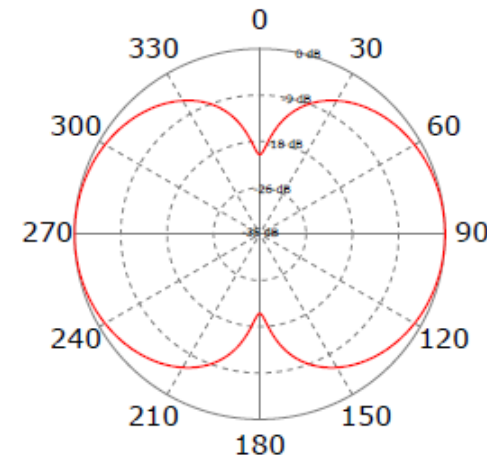


Poly2tri - github

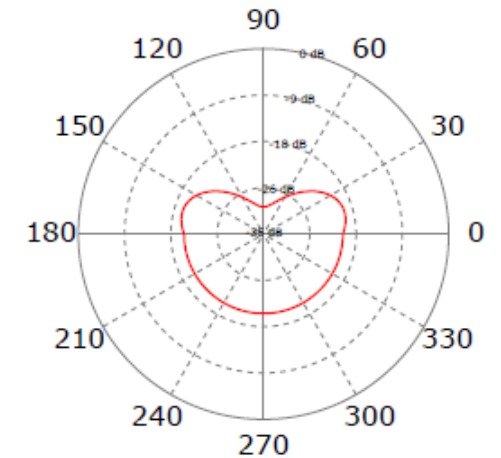


Quelques nouveautés

- Triangulation du domaine
- Train
- Directivité

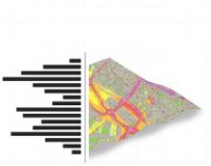


TRACTIONB Horizontal



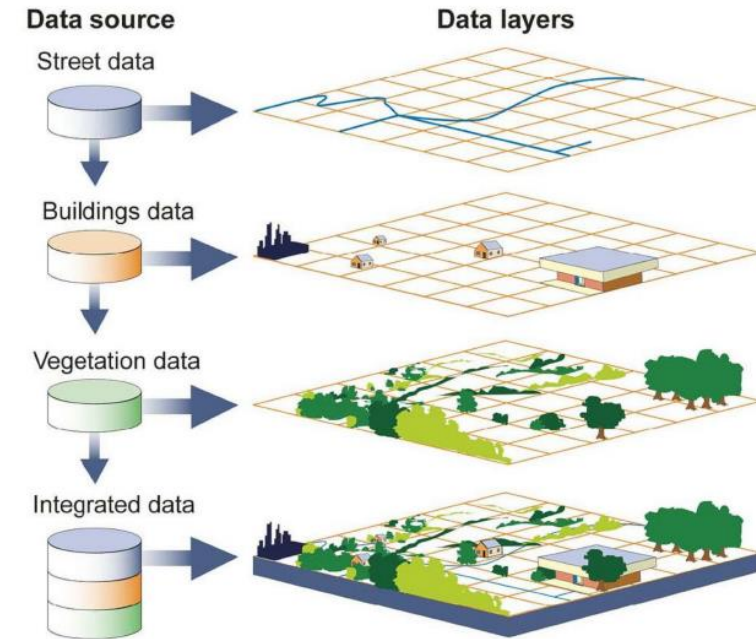
TRACTIONB Side

Nicolas Fortin, 2021

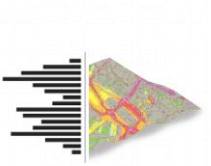


Quelques nouveautés

- Triangulation du domaine
- Train
- Directivité
- Import OSM
- Couplage avec Matsim

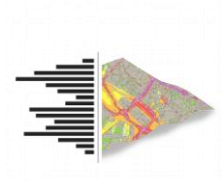


Gwenaél Guillaume, 2021

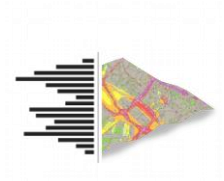


Quelques nouveautés

- Triangulation du domaine
- Train
- Directivité
- Import OSM
- Couplage avec Matsim
- Windows installer (.exe)

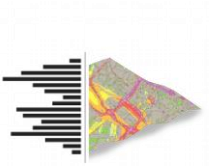


IV. Usages



Usages

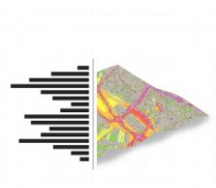
- <https://noisemodelling.readthedocs.io/en/latest/Contributions.html>
- + 15 papiers de recherche et conférence
- 5/6 startups / TPE et associations
- 3 laboratoires de recherche
- 1 grande entreprise
- Cartographie nationale - PLAMADE



Examples



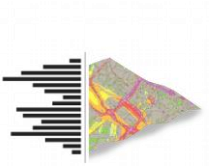
Guillermo Quintero et al. 2018



Examples



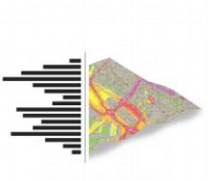
Pierre Aumond 2019



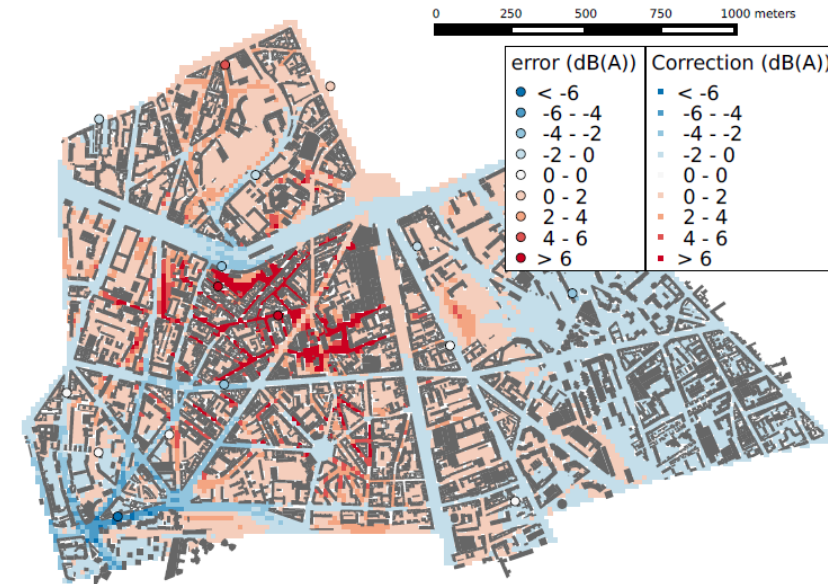
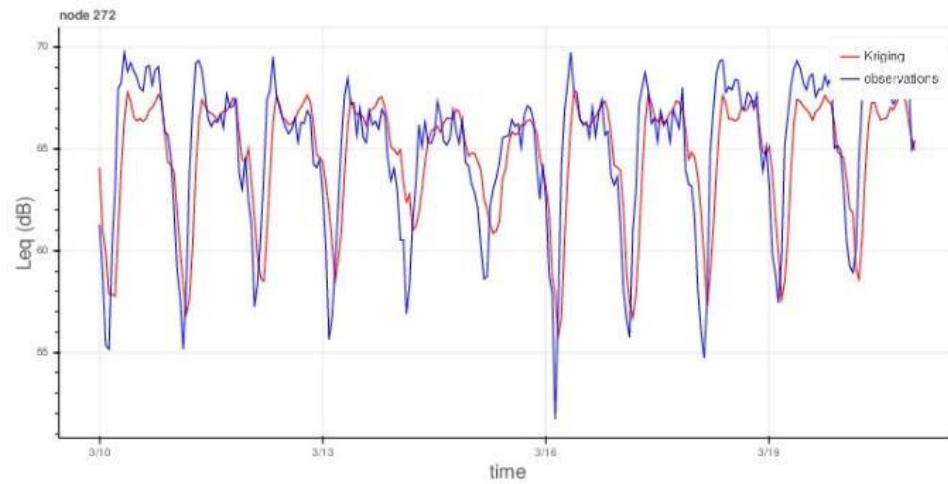
Examples



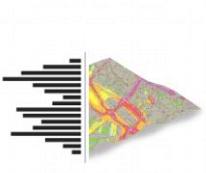
Antoine Lesieur et al., 2020



Examples

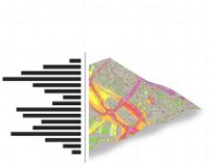


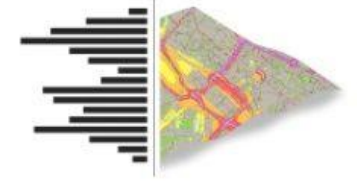
Antoine Lesieur et al., 2020



A suivre...

- Couplage Symuvia/MaTSim (Arnaud Can, Valentin Lebescond)
- Nouveaux développements pour la prise en compte des façades végétalisées (Nature Based Solutions « NBS ») (Benoît Gauvreau, Nicolas Fortin)





**The NoiseModelling day 2021
will be held on June 9th**

From 10am to 4pm (French, UTC+2)
in the form of a webinar, more info:
https://noise-planet.org/noisemodelling_days.html

Merci !

Séminaire de transfert COP – JTAV 2021

